

REMARKS**1. The Amendments and the Support Therefor**

No claims have been canceled, six new claims (71-76) have been added, and claims 1, 14, 27, and 40 have been amended to leave claims 1-5, 7-18, 20-31, 33-44, 46-52, and 67-76 in the application. A form PTO-2038 authorizing a charge for any newly-submitted claims in excess of the amount previously paid for should accompany this Response, as per 37 CFR §1.16(b)-(d), with the fee due being calculated as follows:

FEE CALCULATION

For	Already Paid	No. Extra	Rate (SMALL ENTITY)	Fee (SMALL ENTITY)
Total Claims	58 - 52 =	6	x \$9 =	\$54
Independent Claims	6 - 4 =	2	x \$42 =	\$84
2-Mo. Extension				\$205
Total:				\$343

No new matter has been added by the amendments or new claims, with the amendments merely further clarifying the previously-recited limitations (as discussed in Section 2 of this Response) and new claims 71-76 finding basis (for example) in claims 1, 7, and 9.

2. Sections 1-2 of the Office Action: Rejection of Claims 1-5, 8, 10-19, 21, 23-31, 34, 36-44, 47, 49-52, and 67-70 under 35 USC §103(a) in view of *Drobyshev et al* (Gene (1997) 188:45-52) and U.S. Patent 6,174,670 to Wittwer

The Examiner asserts that it would be *prima facie* obvious to one of skill in the art to employ the SYBR Green markers of Wittwer in the method of Drobyshev, and thereby obtain a method in accordance with the present claims. In particular, the Examiner asserts that the claimed "single DNA strand of a double stranded DNA of at least 40 base pairs containing the locus of a variation, bound to a solid surface" encompasses the gel immobilized 10-mer oligonucleotides of Drobyshev, alleging that:

- (1) a polyacrylamide gel constitutes a "solid surface" as claimed (pages 8-9 of the Office Action);